

SOMERSET COUNTY DEPARTMENT OF HEALTH

ANNUAL REPORT SUMMARY & ENVIRONMENTAL HEALTH ASSESSMENT & IMPROVEMENT PLAN -2007-

Purpose & Authority

This Assessment and Improvement Plan has been developed to address environmental issues and describe the activities and goals within the Somerset County Department of Health. The Plan will outline proposed services that will improve our efforts to increase the environmental quality of the County of Somerset.

The Somerset County Board of Chosen Freeholders created the Somerset County Department of Health (SCDH), pursuant to *N.J.S.A. 26:3A2-1 et seq.*, to provide environmental health services throughout the County. Focus areas include solid waste compliance monitoring, air quality, water quality, and community noise enforcement. Since 1992, SCDH has conducted compliance and enforcement activities as a New Jersey Department of Environmental Protection (NJDEP) certified agency, under the County Environmental Health Act (CEHA). This gives SCDH authority to enforce applicable environmental State Statutes and Administrative Codes. The Department and its certified subcontracting agencies investigate citizen complaints, perform routine NJDEP delegated inspections and provide public information and education services in matters concerning environmental health. SCDH gathers evidence of violations as required and pursues enforcement when indicated. SCDH is authorized to issue civil administrative penalties and convene settlement negotiations with violators of NJDEP regulations.

The Somerset County Department of Health also serves as the local health department for the Borough of North Plainfield, while public health issues within the other 20 municipalities of the County are addressed by 9 other distinct local health agencies. SCDH serves as the central agency for the County's Local Information Network Communications System (LINCS), the Bioterrorism Grant Preparedness Project, and has established a Governmental Public Health Partnership (GPHP) to support and guide the development of environmental and public health services within the County.

Community Background

Somerset County, located in the heart of central New Jersey, occupies an area of 306 square miles with a diverse mix of urban and suburban neighborhoods and rural countrysides. Established in 1688, the County is one of the oldest in America and historic sites are found in virtually all of its 21 municipalities. The 2005 population estimate was 319,900, with a population density of 1,045 people per square mile. Somerset County remains one of the most rural counties in the State, with 23% of the land devoted to agriculture. Nonetheless, the population has increased dramatically – 23.8% - over 1990 levels, compared with 8.6% growth throughout the State. Over ¼ of the County population is below 18 years of age. Smart growth and preserving open space are important issues to County residents. The County has preserved over 4,600 acres of farmland through 2006, and the Somerset County Park Commission maintains over 9,500 acres of open space including five parks, several golf courses, hiking and bicycling trails, picnic areas, an Environmental Education Center and the

County Fairgrounds. Somerset County residents enjoy a relatively low rate of poverty and relatively high rate of homeownership. The 2004 per capita income was \$38,700, with a median household income of \$84,892, and the County's unemployment rate, as of early 2006, was 3.6%, well below the statewide average. Somerset County attracts and retains well-known corporations including pharmaceutical and life sciences companies, and new jobs are expected to make up close to 50% of Somerset's projected annual job openings.

Personnel and Equipment

The Somerset County Department of Health maintains a full-time staff of 14 professionals consisting of: Director of Public Health, Epidemiologist, Health Educator/Risk Communicator, CEHA Coordinator, 3 CEHA Principal Inspectors, one Registered Environmental Health Specialist, a Public Health Nurse Director, an Information Technology Specialist, Practice Standards Coordinator, LINCIS Coordinator, Office Manager and an Administrative Assistant. SCDH also oversees the grant administration for the contractual positions of the Somerset County Medical Reserve Corps and the Somerset County Cancer Coalition. Field staff utilize equipment that includes four trucks, five GPS units (three hand held units and two back pack units), GIS supporting software and plotter, laptop computers, digital cameras, Nextel radio/telephones, two portable radios, a video camera, one four-gas meter with PID capability, weather monitoring equipment and range finder for air inspections, one gas leak detector and two certified noise meters. All vehicles are equipped with mobile radios and all inspectors have appropriate personal protective equipment.

Environmental Issues and Program Goals

Clean Air

The Somerset County Department of Health is committed to reducing incidences of air pollution in Somerset County. Our goal is to ensure that air throughout the County is healthful to breathe and that air pollutants will not damage our forests, land and water bodies. In 2005, sampling stations for the suburban area of Middlesex, Morris and Somerset Counties showed 13 days where ground level ozone exceeded health standards (based on the EPA's 8-hour standard). Daily air quality information can be found at www.state.nj.us/dep/airmon/. Ground level ozone is formed as a by-product of volatile organic chemicals and nitrous oxides emitted from motor vehicle exhaust, industrial facilities and gasoline vapors. Ozone is implicated in health issues such as asthma and increased susceptibility to respiratory illnesses, to environmental damage including reduced crop yields and tree leaf damage. SCDH works closely with NJDEP initiatives to reduce ozone-forming emissions wherever possible.

Through September 30, 2006, inspectors conducted 53 routine NJDEP-delegated inspections of minor source permitted facilities, including those containing regulated boilers or emergency generators, paint shops, gasoline service stations, and dry cleaning facilities. SCDH also responded to 44 complaints involving air quality issues. Finally, CEHA staff devoted over 65 man-hours to surveillance for idling vehicles – a large source of particulate pollution. SCDH worked proactively with business owners to encourage the posting of "No Idling Zone" signs to educate patrons and prevent excessive idling at their properties. Several companies have since implemented Statewide posting of these signs, based on the efforts of

CEHA staff in Somerset County. The air program is an important and substantial portion of our CEHA delegated inspections, representing approximately 30% of staff activities.

Activities for 2007 will include continued routine compliance inspections of permitted facilities, and enforcement where indicated. SCDH will promptly respond to NJDEP referrals and citizen complaints of odors, open burning, truck idling and other sources of particulate emissions. Routine idling enforcement in problem areas will be continued as staff availability allows. Staff will maintain certifications in Visual Emissions and Odor Field Enforcement.

Clean Water

Somerset County residents are concerned about having sufficient quantities of clean ground and surface water for consumption and recreational purposes. Drinking water sources are varied throughout the County, with urban and suburban communities utilizing public water supplies and the vast majority of rural communities relying on private well water. The Somerset County Department of Health plays an active role in the oversight and regulation of public non-community (PNC) water sources. Any drinking water well which has the potential to serve 25 or more persons, for at least 60 days, in a given calendar year falls under the scope of SCDH's jurisdiction and these systems are required to perform various levels of water quality analyses each year to ensure a safe and potable drinking water supply.

In 2006, 25 routine PNC inspections were conducted through September 30th. The vast majority of facilities were found to be in compliance with Safe Drinking Water Act regulations. In most cases, quarterly and annual testing results are satisfactory and communicated to NJDEP in a timely fashion. In 2007, SCDH will develop programs to educate the regulated community about maintenance and upkeep of their water treatment and distribution systems. SCDH has developed a mandatory, standard application/approval form for PNC systems requiring physical alterations and/or wishing to install water treatment devices. Finally, a small portion of Somerset County is located within the Preservation Area of the Highlands Region. SCDH is responsible for the review and approval of any PNC installations or system modifications within this Area.

The regulation of private wells throughout the County falls under local health department authority. Installation and testing requirements of residential wells vary by municipality. Additionally, smaller public facilities that do not meet the PNC classification are outside the jurisdiction of SCDH, and gaps exist in our knowledge of the water quality at these facilities. Local health departments also oversee the water quality of all recreational bathing facilities in the County, under NJDHSS authority and regulations. In 2007, SCDH will seek to collaborate with the Somerset County Health Officer's Association to begin development of uniform protection for County residents throughout the 21 municipalities, and to ensure that all residents are knowledgeable about their drinking water quality.

SCDH serves as an intermediary for results obtained through the Private Well Testing Act. Water quality information from residential real estate transactions is reviewed by SCDH, adding to our knowledge of Countywide trends, and then transmitted to the local health department authority. The local health officer has the final say in any decision to provide public notification of contamination, or to recommend testing of surrounding residences. Over 190 PWTA analyses have been reviewed in 2006 (through September 30th). Through CEHA funding, the SCDH has offered, and will continue to offer as available, limited reimbursement for municipal groundwater testing to support local health departments. From September 2002 through March 2003, State summary data showed fecal coliform bacteria and arsenic to be the

greatest contaminants of concern in the County. Out of 313 wells sampled, 21 showed bacterial contamination and 18 had levels of arsenic above guidelines. Bacterial contamination of a well can be the result of nearby septic system malfunction and/or physical deterioration of the system itself. Arsenic is a naturally occurring compound in abundance in some areas of Somerset County. NJDEP is expected to release updated PWTA summary statistics in the near future. Throughout 2006, SCDH continued to monitor these trends, plotted points of contamination through GIS mapping and shared this information with local counterparts.

Surface water quality is also an important issue in Somerset County, with EPA data showing a significant portion of surface water bodies having some form of impaired quality. SCDH is committed to ensuring that rivers, lakes and streams will be fishable, swim-able and support healthy ecosystems. Somerset County has an excellent supply of water in the region, since the major reservoir system of New Jersey, Round Valley and Spruce Run, feeds directly into the Raritan River, which traverses Somerset County. Additionally, the Delaware and Raritan Canal traverse the southern portion of the County. In 2005, SCDH began a new project to assist NJDEP in ambient surface water monitoring and that work continued successfully throughout 2006. SCDH also works in partnership with our County Engineering Department to analyze information collected from NJDEP's stormwater regulations. By analyzing water discharged into streams and rivers from regulated outfalls, we will decrease the amount of illicit connections and potential pollution in County waterways.

In 2006, SCDH began development of the Waterways Monitoring & Enforcement Team. This team will work with NJDEP, municipal agencies, watershed associations, the water supply authority, and the Somerset County Division of Mosquito Control to navigate and patrol the waterways of Somerset County, identify illegal discharges, and monitor the quality of the County's rivers and streams. Through this and other efforts, the CEHA program has increased its focus on prevention and enforcement of violations of the Water Pollution Control Act. By working in conjunction with Local and County Emergency Management officials, investigations of significant environmental releases are conducted to determine if a responsible party has violated these regulations. Finally, SCDH has expanded its capabilities to analyze water quality in the field, giving the Department rapid evidence in support of regulatory proceedings. In 2007, SCDH will expand in this area and formalize a laboratory partnership to quickly and accurately conduct testing in the event of accidental or deliberate contamination of the County's waterways. The CEHA water program has grown substantially in 2006, and now represents approximately 30% of staff activity.

Solid Waste Inspections/Enforcement

The Somerset County Department of Health is committed to ensuring an environment free from litter, illegal dumping and unsafe solid waste transportation and/or disposal facilities. The solid waste program is therefore an important and significant part of our delegated CEHA activities. Approximately 30% of CEHA activity is dedicated to solid waste compliance and enforcement. Through 9/30/06, field staff conducted 24 routine facility inspections and initiated 165 field investigations, which include compliance evaluations of solid waste haulers, investigations of abandoned or illegally dumped materials, and inspections of tire sites referred through the County's Mosquito Control Division.

In 2007, SCDH will continue to perform routine compliance inspections of solid waste facilities within the County, including one privately owned transfer station and intermodal facility, several recycling centers, citizen drop-off sites, farmland mulch sites and compost

facilities. Additionally, improperly maintained waste collection equipment, illegally run collection operations and violators of waste disposal regulations will be penalized as necessary. SCDH will continue to play an active role in abating areas of improperly disposed or stockpiled tires, which serve as mosquito breeding habitats.

Finally, field staff will continue to perform inspections to determine recycling compliance at schools, multi-unit housing facilities, convenience stores and office complexes. Results are communicated to our County Recycling Coordinator for outreach and education, and enforcement is initiated as needed. Forty-seven properties have been evaluated to-date for compliance with the County's mandate for source-separation of recyclable materials. SCDH also participated in an outreach effort to the business community, through the Somerset County Business Partnership's annual Recycling Compliance Seminar. In 2007, SCDH will also develop educational outreach to businesses & residents about the safe disposal of universal waste, such as fluorescent bulbs. The County of Somerset Public Works Department provides curb-side recycling pick-up for its residents and the County's Office of Solid Waste Management sponsors six household hazardous waste days annually, which are monitored by a SCDH representative.

A Noise Free Environment

Somerset County residents are concerned about excessive noise that degrades their quality of life. Accordingly, SCDH is committed to respond to their concerns by appropriate investigation and enforcement of violators of the State Noise Code (N.J.A.C. 7:29). SCDH employs three professionals certified in Community Noise Enforcement, and maintains two regularly calibrated noise meters to investigate noise complaints. These complaints typically arise in areas where manufacturing and industrial facilities are in close proximity to residential zones. While the number of noise complaints remains low, each incident has significant impact upon the citizens subjected to it. Accordingly, SCDH will react aggressively to ensure the elimination of unwanted and irritating noise, maintaining the quality of life that Somerset County residents deserve.

In 2006, 13 complaints were investigated, resulting in 3 enforcement actions to date. It is important to note that many other instances of noise violations are handled each year at the local health department level within this County, as many townships have sought to adopt the Model Noise Code and pursue enforcement with local police officers and health department personnel. SCDH will remain an active partner in ensuring that ongoing training and resources are available to these departments.

Safe & Healthy Communities/Hazardous Materials Team Preparedness

Somerset County residents must be protected from health and ecological risks from hazardous substances. The safe use, transport and disposal of hazardous materials is overseen by the Somerset County Office of Emergency Management. OEM staff are trained and prepared in HazMat investigations, and a portion of CEHA grant monies are utilized for the equipment and training needs of OEM personnel. First responders at all levels are receiving comprehensive training in bioterrorism, as well as nuclear and chemical threats. CEHA staff work in partnership with OEM/HazMat personnel to investigate environmental releases, mitigate potential threats to the environment, ensure continued environmental and public health oversight, and to seek prosecution of the responsible entity, where applicable.

Other Environmental Issues

It should be noted that there are many other vital environmental issues affecting Somerset County residents not specifically outlined here. The joint efforts of SCDH and local municipal and health department counterparts are crucial in addressing residents concerns about indoor air quality, underground storage tanks, septic systems, radon, pesticides, occupational health and a multitude of other environmental concerns. Regulation and education in these areas are accomplished through local, County and State professionals. It is necessary to increase the dialogue between agencies about emerging environmental issues of concern to Somerset County residents. The collaborative efforts of the Somerset County Health Officers Association and the Governmental Public Health Partnership will expand our knowledge and allow a forum for focused, County-wide action to address environmental issues. In 2007, SCDH will research the PACE EH assessment tool and collaborate with the County's Environmental Education Center to promote environmental awareness throughout the residential and business sectors.

Open and Effective Government

The Somerset County Department of Health encourages the development of strategic partnerships with other local, state and federal agencies, non-profit organizations, environmental commissions, the general public and the business community to address environmental issues and concerns. In recent years, the CEHA program has developed strong alliances with County law enforcement personnel, to ensure an appropriate and rapid response to potential environmental crimes. In 2007, SCDH will develop an environmental health survey instrument to identify the major concerns of citizens and local governments (either independently or as part of the PACE EH process). The CEHA program will continue open dialogue with local health departments on environmental issues and foster cooperation regarding identification and referrals of new, potentially regulated operations. Finally, SCDH continues to increase training and usage of GIS technology to spatially pinpoint areas of environmental concern, and display this information to the public and our local colleagues as rapidly as possible. For example, in 2006, CEHA inspectors documented the location of all perc and non-perc dry cleaning operations within the County and, in 2007, will continue the GPS mapping of gasoline service stations, and relate this information to known areas of groundwater contamination. Completed information will be posted on the County website, and shared with NJDEP as requested.